



ethernet-apl™
advanced physical layer

BRAND GUIDELINES

RELEASE: NOVEMBER 2023



INDEX

01 LOGO

Page 03

02 COLOR

Page 08

03 TYPOGRAPHY

Page 10

04 IMAGERY

Page 13

05 USE

Page 17

06 CONTACT

Page 20



01 LOGO



LOGO

Logo of Ethernet-APL™

The Ethernet-APL™ logo is always used with the figurative mark and, if possible, with the claim. You can use the logo horizontally or vertically.

In text the brand wordmark is written as **Ethernet-APL™**, but never E-APL. The wordmark shall include the TM designation for the first instance of usage in a document at a minimum. If you want to use the term “APL” in text, you should introduce it as “Advanced Physical Layer (APL)” in the first usage.

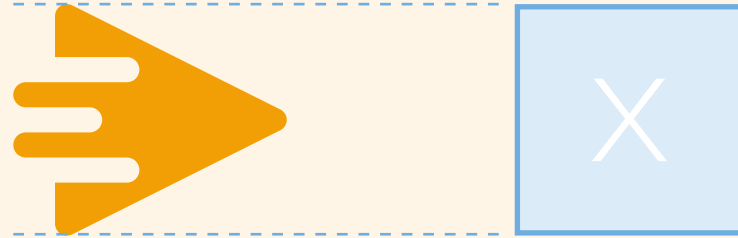
The figurative mark may be used alone if the complete mark (wordmark or logomark) has been shown previously at least once in the same document, e.g. on a slide or a page of a brochure.

Use the following shortcut in Microsoft Word to place the Trademark Symbol:

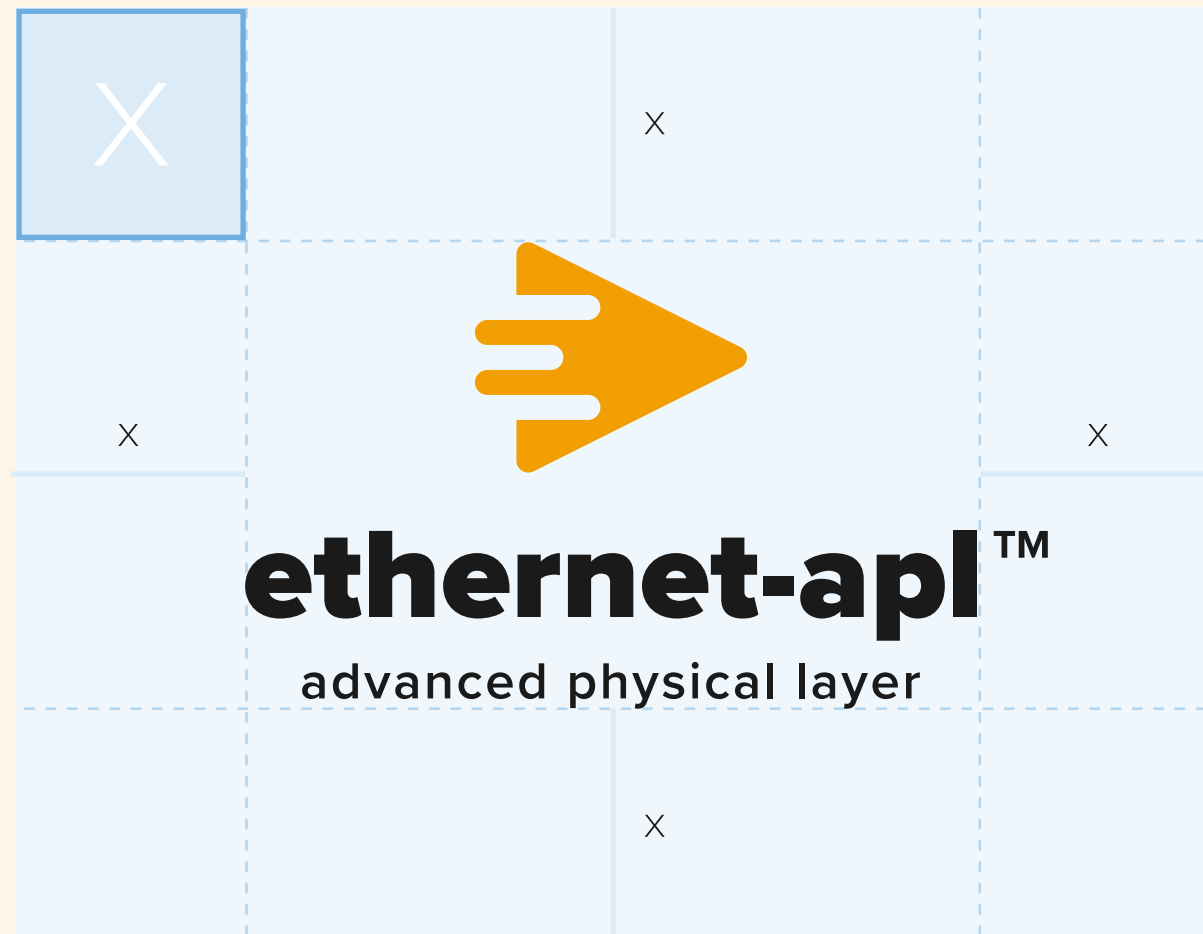
Ctrl + Alt + T



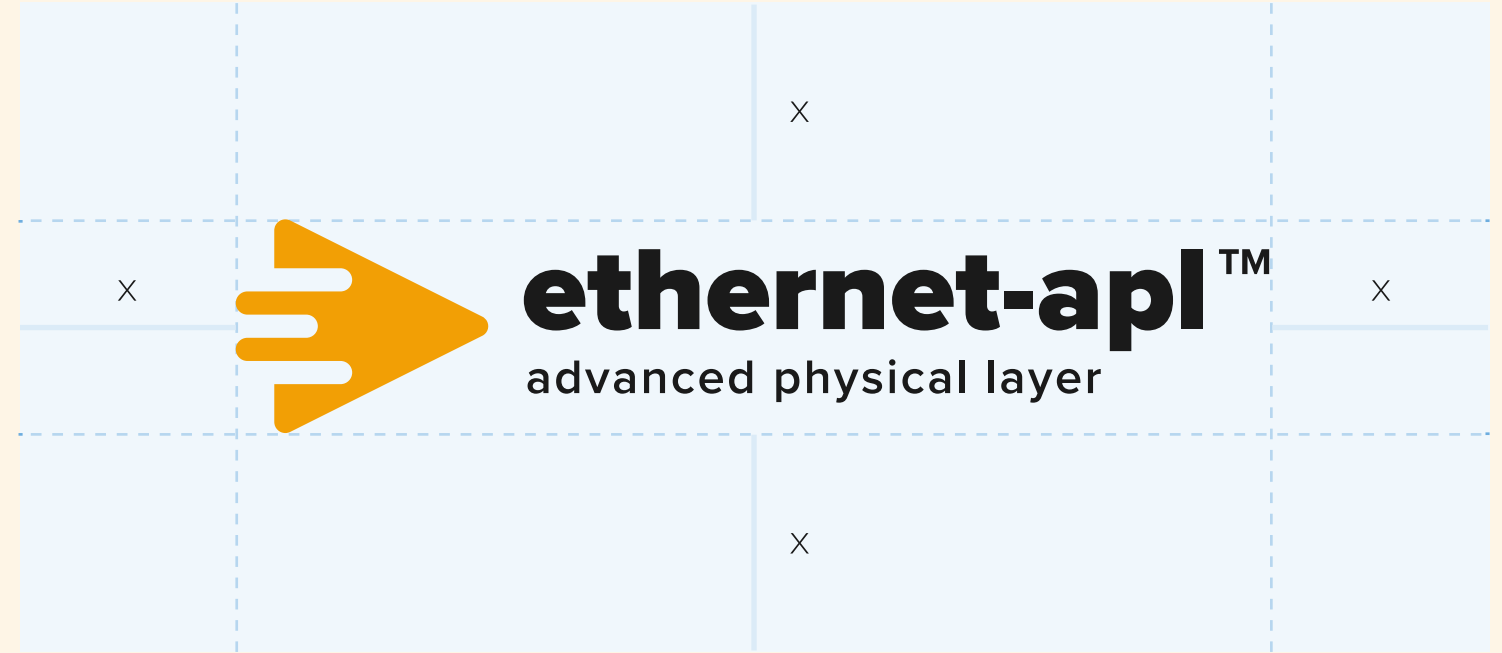
LOGO WITH PROTECTION ZONE



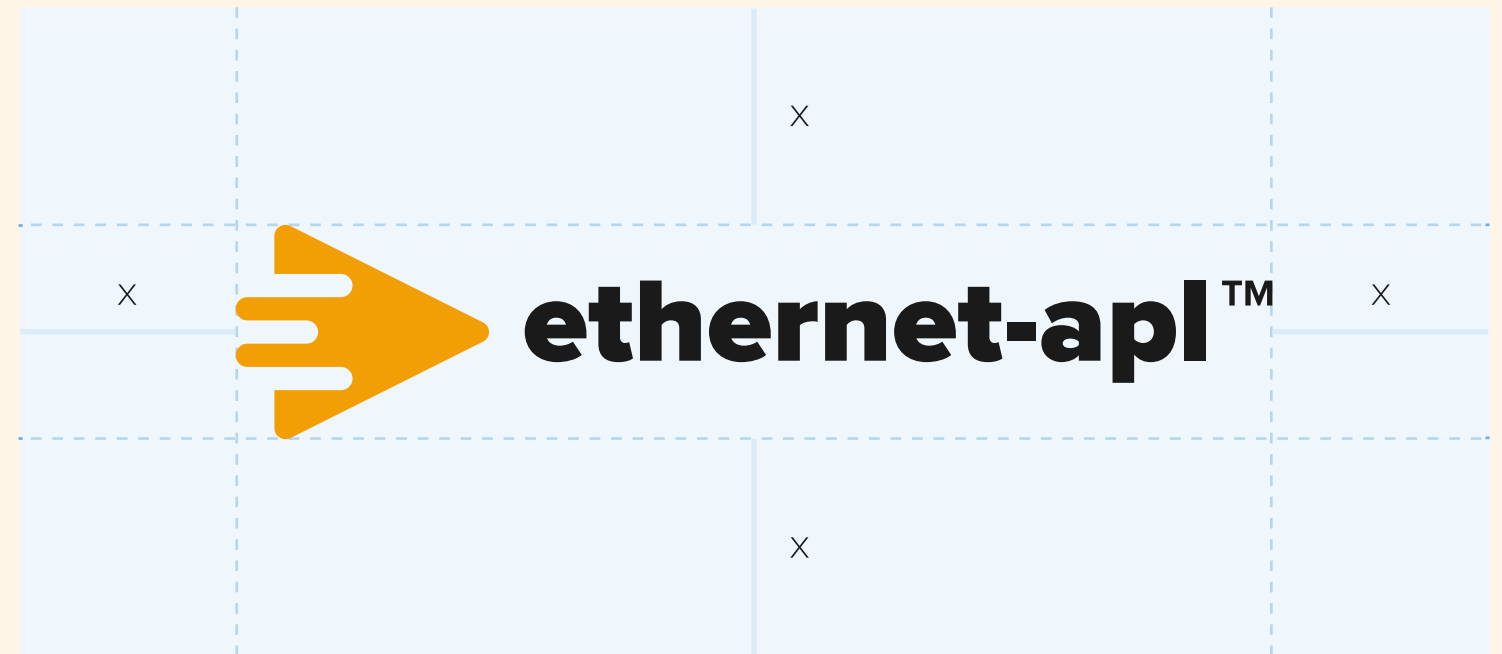
The figurative mark determines the distance dimension



Logo vertical with claim



Logo horizontal with claim



Logo horizontal without claim



How to use the Ethernet-APL™ logo

This page explains the proper use of the Ethernet-APL™ logo. The **vertical** and the **horizontal** version can be set in black as well as in white, if necessary due to backgrounds or corporate requirements. However, the standard variant is preferred for the majority of logo usage. The logo may be used on pictures, but only if the background is calm or monochrome.

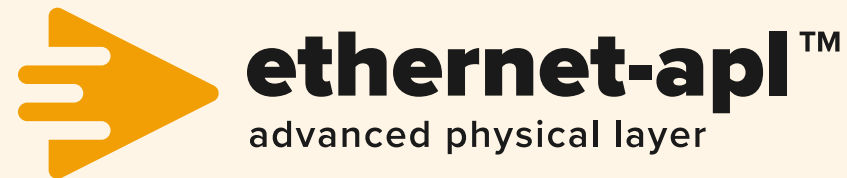


Any member of, or any entity that has been licensed to use **Ethernet-APL** from **FieldComm Group, ODVA, OPC Foundation, or Profibus/Profinet International** may use this logo in general marketing collateral that is not directly affiliated with a product or product line.



Use on, or in conjunction with, specific products or product lines is limited to those entities that have been licensed to use **Ethernet-APL** from one of the following organizations: **FieldComm Group, ODVA, OPC Foundation, or Profibus/Profinet International**. If certification or conformance testing is required by the licensing organization, this must be completed for the specific network or networks integrated into the product.

STANDARD
(DEFAULT/MAJORITY USE)



BLACK
(EXCEPTION FOR VERY LIGHT
BACKGROUNDS OR IF CORPORATE
RULES REQUIRE BLACK INK ONLY)



WHITE
(EXCEPTION FOR SOLID OR DARK BACKGROUNDS)



Improper logo usage

The following examples explain how the logo may not be used. **The logo may not be changed.**
Please follow the only acceptable uses as described on the previous page.

Without the Trademark symbol



Colored monochrome other than black



Figurative mark in the wrong color



Combined with another brand or any other logo to create a "composite" logo



Inserted at an angle



Distorted in any way



02 COLOR



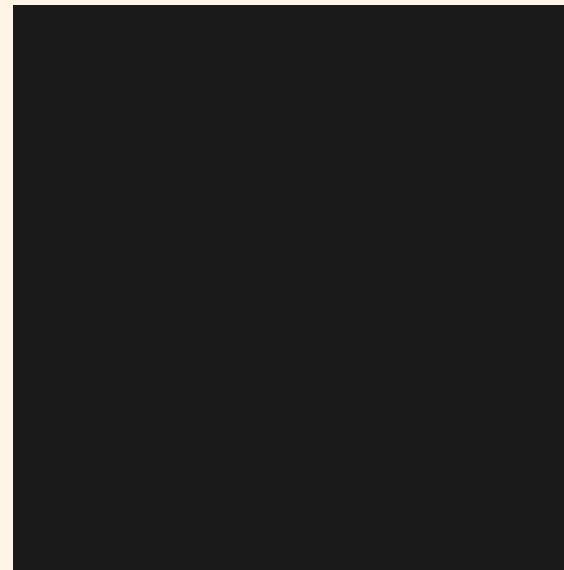
PRIMARY COLORS

APL Orange



#F29F05
R242 G159 B5
C0 M40 Y95 K0

APL Black



#1A1A1A
R26 G26 B26
C75 M65 Y60 K80

White



#FFFFFF
R255 G255 B255
C0 M0 Y0 K0



SECONDARY COLORS

APL Fire Red



#F23030
R242 G48 B48
C0 M90 Y75 K0

APL Forest Green



#03A64A
R3 G166 B74
C80 M0 Y90 K0

APL Sky Blue



#43CAD9
R67 G202 B217
C65 M0 Y20 K0



03 **TYPOGRAPHY**



Font for Print & Web

Open Sans features modern proportions and strict geometric shapes. This is the font for print and web applications (web font available!). It is used as the corporate typeface for business papers and the website.

Download Google
Open Sans
[https://fonts.google.com/
specimen/Open+Sans](https://fonts.google.com/specimen/Open+Sans)

Open Sans

The quick brown fox jumps over the lazy dog

The quick brown fox jumps over the lazy dog

0 1 2 3 4 5 6 7 8 9

., ; ! ? § \$ % & = @ € () + # " „ ä Ä ö Ö ü Ü

Light

The quick brown fox
jumps over the lazy dog

Regular

The quick brown fox
jumps over the lazy dog

Bold

**The quick brown fox
jumps over the lazy dog**

ExtraBold

**The quick brown fox
jumps over the lazy dog**



Systemfont: Arial

The Arial font, which is available for everyone, is used for e-mail traffic and open media such as PowerPoint.

Arial

The quick brown fox jumps over the lazy dog

The quick brown fox jumps over the lazy dog

0 1 2 3 4 5 6 7 8 9

., ; ! ? § \$ % & = @ € () + # “ „ ä Ä ö Ö ü Ü

Regular

The quick brown fox
jumps over the lazy dog

Bold

The quick brown fox
jumps over the lazy dog

Black

**The quick brown fox
jumps over the lazy dog**



04 IMAGERY



IMAGERY

Preferred pictures

As a rule, pictures should show industrial landscapes or applications or pictures that represent an Ethernet network. It should be ensured that there is enough space for text or logos. You should also make sure that the pictures are not too restless. A clear visual language is preferable.

If possible, the colors orange or reddish yellow should appear in the pictures.



www.shutterstock.com

1. shutterstock_156631511
2. shutterstock_444320401
3. shutterstock_361667525
4. shutterstock_1079750258
5. shutterstock_1706536765
6. shutterstock_599557121





GRAPHICS

Use and design of graphics

Infographics / graphics can be used to explain complex content. It should be possible to gather important information quickly. The diagram should be simple and clear – lines, bars and also icons serve as a toolset. A legend with a few key points can also be useful.

Less is more – just visualize important information.

Coloring of graphics

In addition to the primary color, APL Orange, the following shades of blue can be used:



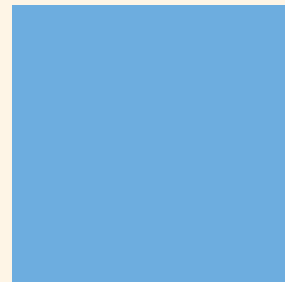
#F29F05
R242 G159 B5
C0 M40 Y95 K0



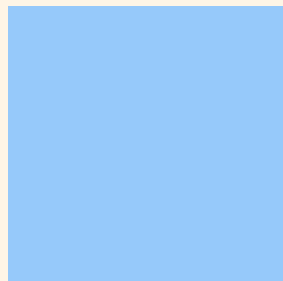
#366CAC
R54 G108 B172
C80 M50 Y0 K10



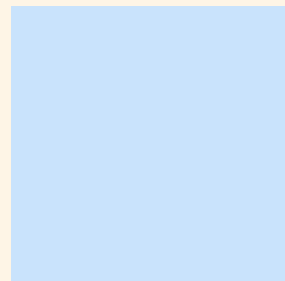
#2D89CA
R45 G137 B202
C77 M36 Y0 K0



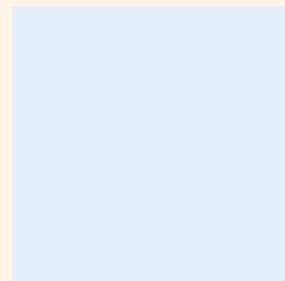
#6DADDF
R109 G173 B223
C58 M20 Y0 K0



#96C9FA
R150 G201 B250
C43 M11 Y0 K0

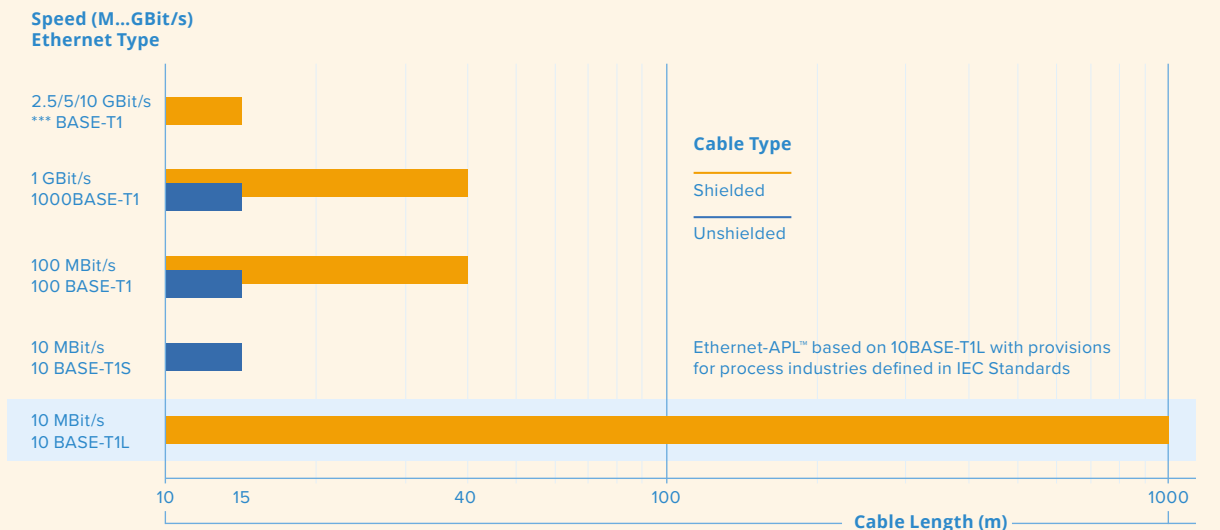
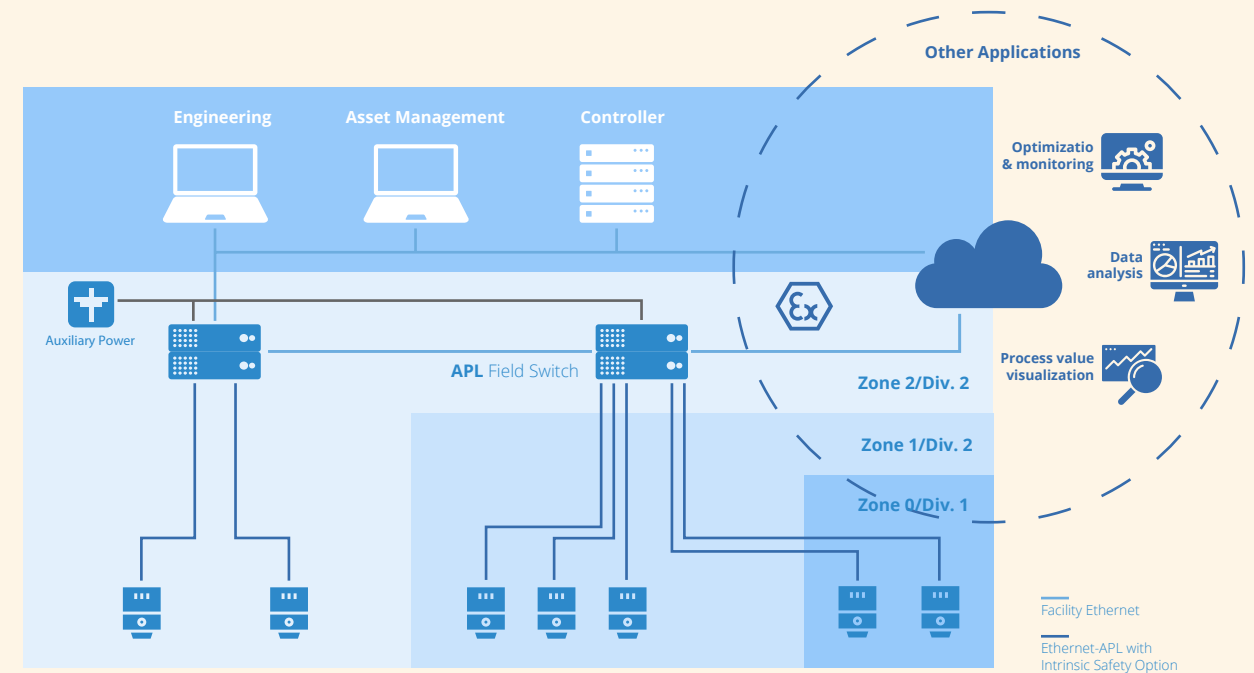


#C9E3FC
R201 G227 B252
C24 M5 Y0 K0



#E3F0FC
R227 G240 B252
C13 M3 Y0 K0

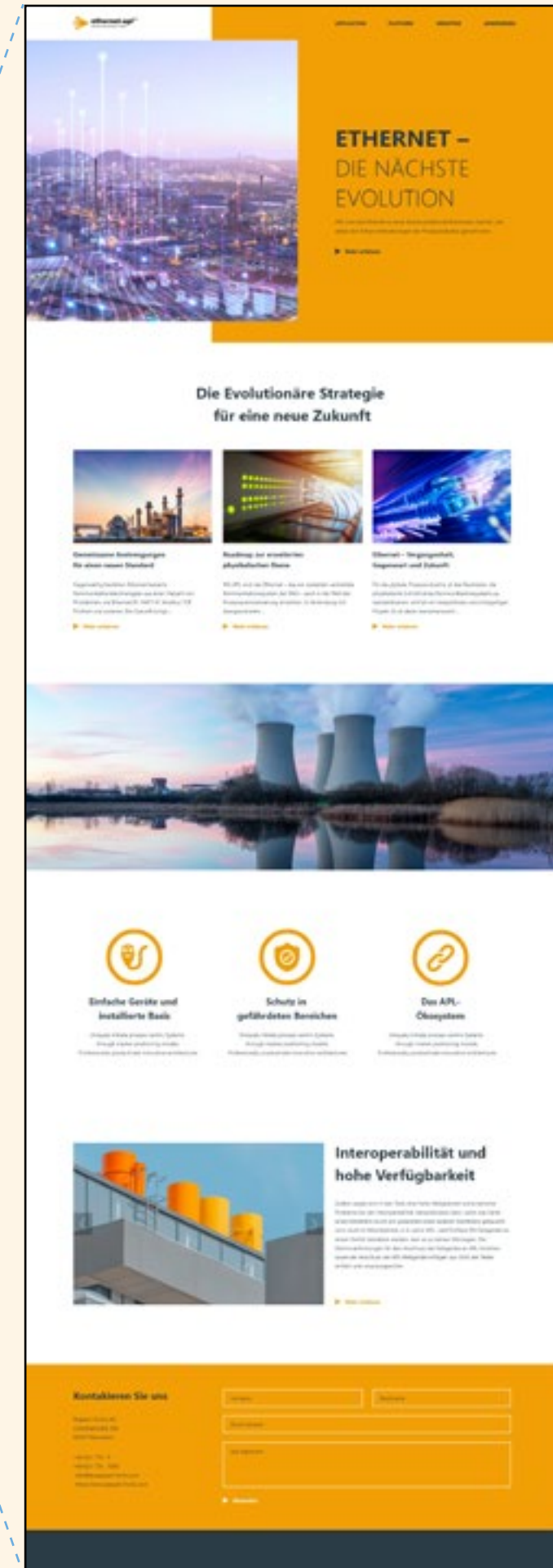
Examples of graphics

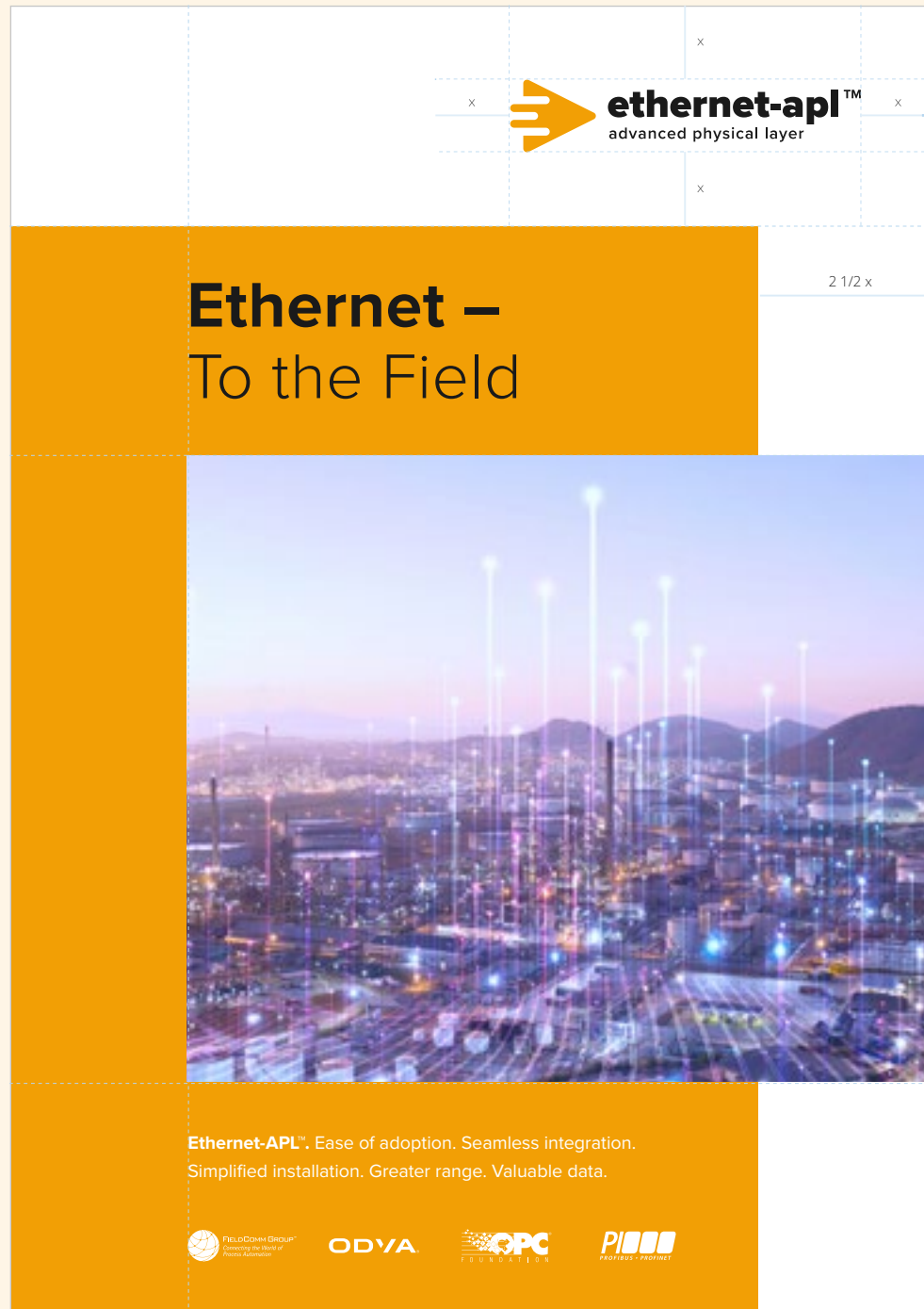


05 USE



CORPORATE WEBSITE





ethernet-apl™
advanced physical layer

Ethernet – To the Field

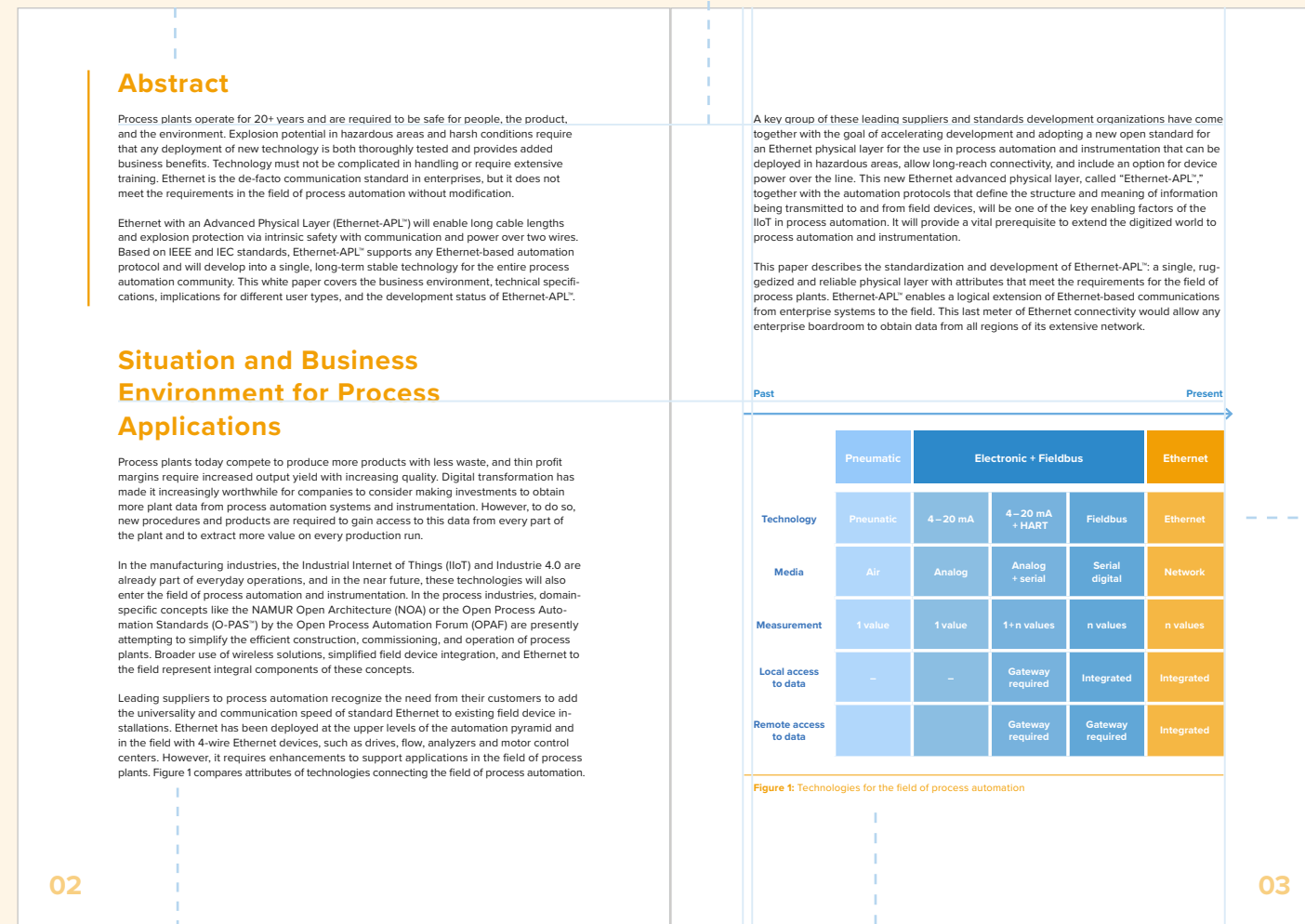
Ethernet-APL™. Ease of adoption. Seamless integration.
Simplified installation. Greater range. Valuable data.



Logo on the right side

Headline 1: Bold, 25 Pt

Use reference lines



Abstract

Process plants operate for 20+ years and are required to be safe for people, the product, and the environment. Explosion potential in hazardous areas and harsh conditions require that any deployment of new technology is both thoroughly tested and provides added business benefits. Technology must not be complicated in handling or require extensive training. Ethernet is the de-facto communication standard in enterprises, but it does not meet the requirements in the field of process automation without modification.

Ethernet with an Advanced Physical Layer (Ethernet-APL™) will enable long cable lengths and explosion protection via intrinsic safety with communication and power over two wires. Based on IEEE and IEC standards, Ethernet-APL™ supports any Ethernet-based automation protocol and will develop into a single, long-term stable technology for the entire process automation community. This white paper covers the business environment, technical specifications, implications for different user types, and the development status of Ethernet-APL™.

Situation and Business Environment for Process Applications

Process plants today compete to produce more products with less waste, and thin profit margins require increased output yield with increasing quality. Digital transformation has made it increasingly worthwhile for companies to consider making investments to obtain more plant data from process automation systems and instrumentation. However, to do so, new procedures and products are required to gain access to this data from every part of the plant and to extract more value on every production run.

In the manufacturing industries, the Industrial Internet of Things (IIoT) and Industrie 4.0 are already part of everyday operations, and in the near future, these technologies will also enter the field of process automation and instrumentation. In the process industries, domain-specific concepts like the NAMUR Open Architecture (NOA) or the Open Process Automation Standards (O-PAS™) by the Open Process Automation Forum (OPAF) are presently attempting to simplify the efficient construction, commissioning, and operation of process plants. Broader use of wireless solutions, simplified field device integration, and Ethernet to the field represent integral components of these concepts.

Leading suppliers to process automation recognize the need from their customers to add the universality and communication speed of standard Ethernet to existing field device installations. Ethernet has been deployed at the upper levels of the automation pyramid and in the field with 4-wire Ethernet devices, such as drives, flow, analyzers and motor control centers. However, it requires enhancements to support applications in the field of process plants. Figure 1 compares attributes of technologies connecting the field of process automation.

A key group of these leading suppliers and standards development organizations have come together with the goal of accelerating development and adopting a new open standard for an Ethernet physical layer for the use in process automation and instrumentation that can be deployed in hazardous areas, allow long-reach connectivity, and include an option for device power over the line. This new Ethernet advanced physical layer, called "Ethernet-APL™," together with the automation protocols that define the structure and meaning of information being transmitted to and from field devices, will be one of the key enabling factors of the IIoT in process automation. It will provide a vital prerequisite to extend the digitized world to process automation and instrumentation.

This paper describes the standardization and development of Ethernet-APL™, a single, ruggedized and reliable physical layer with attributes that meet the requirements for the field of process plants. Ethernet-APL™ enables a logical extension of Ethernet-based communications from enterprise systems to the field. This last meter of Ethernet connectivity would allow any enterprise boardroom to obtain data from all regions of its extensive network.

	Pneumatic	Electronic + Fieldbus			Ethernet
Technology	Pneumatic	4–20 mA	4–20 mA + HART	Fieldbus	Ethernet
Media	Air	Analog	Analog + serial	Serial digital	Network
Measurement	1 value	1 value	1+n values	n values	n values
Local access to data	–	–	Gateway required	Integrated	Integrated
Remote access to data	–	–	Gateway required	Gateway required	Integrated

Figure 1: Technologies for the field of process automation

Graphic-Example

Body: Regular, 10,5 Pt

Use a caption



06 CONTACT



**For more information
please contact:**

